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NAME OF PERSON MAILING PAPER OR FEE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the Application of

Rene Langhans

DExaminer: C. Goodman

Group Art Unit: 3724

On ROTARY CUTTING UNIT

Serial No.: 08/883,685

Filed on: June 27, 1997

Our Docket No. 2821-193)

Filed on: June 27, 1997

Hartford, Connecticut, March 21, 2001

Hon. Assistant Secretary and Commissioner of Patents and Trademarks Washington, D.C. 20231

Appellant's Supplement to the Appeal Brief

SIR:

This Supplement is provided to the Appeal Brief refiled on February 28, 2001 in response to Examiner's January 29, 2001 Notice of Non-Compliance. The appeal was taken from the Final Office Action mailed March 8, 2000.

The enclosed four documents are submitted as evidence that pin wrenches for adjusting threaded members through-a-slot exposing the member have been in use since prior to 1924 when production of the Stanley Steamer ceased. (Please see the highlighted text in the documents). See Stanley Steam Car Handbook, pages 1-3, and Figure 3, showing Adjusting Screw and slot.

Please also see Stanley Museum Newsletter, March 1987, p.1,

2 .

discussing construction of a pin wrench and Figure "The Steam Automatic" showing adjusting screw ref. no. 434 used in a Stanley Steam car. Moreover, please see Stanley Museum Newsletter, June 1992, p. 1, and Figure 460 in the second column showing adjusting screw ref. no. 464 used in a Stanley Steam car.

Furthermore, pin wrenches today are staple commodities of commerce available from sources such as catalogue houses. (See excerpts from the 1995 McMaster-Carr Supply Company catalog showing pin wrenches and pin punches).

The enclosed documents have been recently drawn from a variety of sources to show that persons skilled in the mechanical arts have been well versed in the use of pin wrenches for adjusting threaded members for 75 years or more.

Detailed elaboration on pin wrenches and their use should therefore not be necessary in the present patent application.

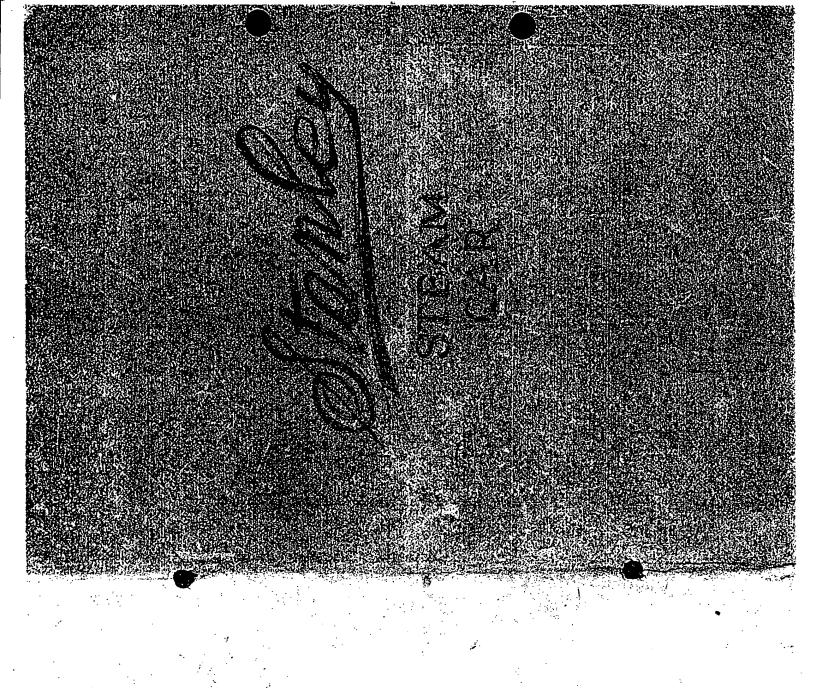
While Applicants believe no fees are due upon filing this response, please charge any deficiencies in fees associated with the filing of this amendment to our Deposit Account No. 13-0235.

Respectfully submitted,

Michael T. Clorite

Registration No. 44,620 Attorney for Applicants

McCormick, Paulding & Huber LLP CityPlace II, 185 Asylum Street Hartford, CT 06103-4102 (860) 549-5290



# FOREWORD

There is nothing mysterious about a Stanley car. Its wheels, axles, chassis frame, body, radiator, steering gear, brakes, storage battery and dynamo are similar to other cars. Its power plant and power control are different and are very simple. The power plant consists principally of

A simple two cylinder double acting steam engine, which is attached rigidly to the rear axle, so that the engine and rear axle; in fact, the whole driving reclianism is a unit, attached to the chassis frame at three points.

A boilor which supplies steam to the engine.

A licrocene burner which supplies heat to the boiler.

A net of tanks and pumps which automatically supply water to the boiler, find to the burnen, and lubricating oil to the engine cylinders.

A RES OF GRECOMATIC valves which control the supply of water to the boller and Incl to the burner.

A radiator which condenses the exhaust steam and returns the water to the water tank.

A storage battery which supplies current for light and for starting the silot light.

A dynamo which automatically charges the storage battery.

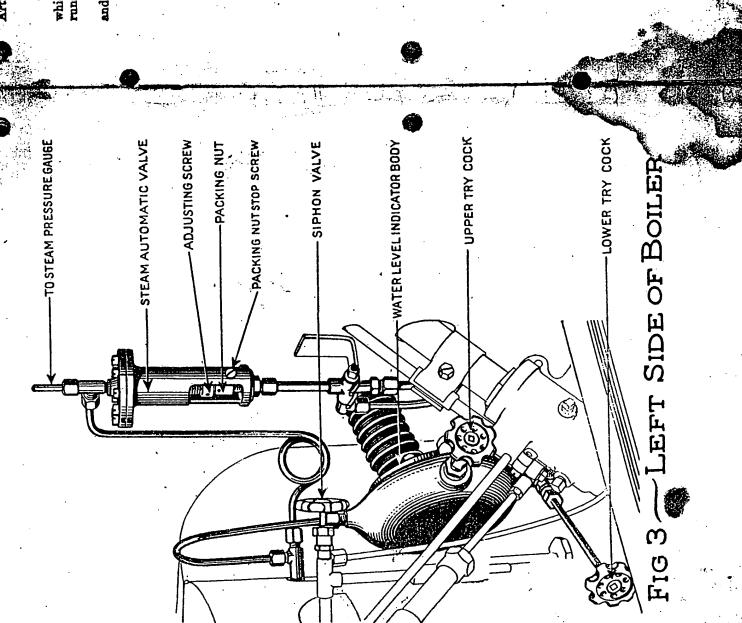
The power control consists of a throttle lever and a reverse pedal.

Mcchanical knowledge is not necessary in order to drive a Stanley car successfully, but a thorough understanding of the car will assist one to get the best results under all conditions.

# STANLEY MOTOR CARRIAGE CO.,

NEWTON, MASSACHUSETTS





Article 2: To STEAM UP (Continued)

See Fig. 3

Open the lower try-cock at the bottom of the water-indicator which is between the boiler and dash on the left side, and see that runs out of it.

If it does, it indicates that the water in the boiler is above this and that is sufficient for steaming up.

More does no harm but will take more time to raise steam. If no water runs out read Paragraph 3 of Article 4.

#### = Steam Talk =

#### Repair of the Stanley Steam Automatic By Ole B. Vikre

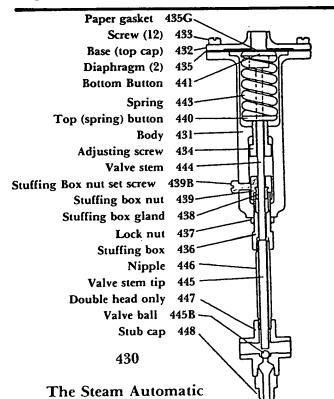
The steam automatic valve, pc. #430 (like the fuel automatic, pc. #460, see STEAM TALK article June 1986, Volume V, Number 1) is a simple diaphragm operated valve, although it works conversely to the fuel automatic.

Clean the parts with pilot fuel, and wire-brush the body, top cap, and double cap (pc. #'s 431, 432 and 447). Then machine the two twelve-hole surfaces by taking a light skim-chip to provide perfectly planed surfaces. Two 0.014" annealed beryllium copper diaphragms and a paper gasket are held between these two surfaces by means of twelve 1/4"-20-NC fillister-head screws 9/16" long.

Machine the seat in the double (or single) head (pc. #'s 442 or 447), after removing the nippel (pc. #446). This is done by turning an adapter in your lathe with a 5/8"-20-NS thread to receive the head. Using a "Letter R" drill (0.339" dia.) ground to 90 degrees included angle, just skim the seat until bright all around. Then, use a flat-bottomed "Letter R" drill to clean the shelf around the seat.

Polish the stem, particularly in way of the packing, using Crocus cloth as the final abrasive.

Assemble the double head, nipple, and stuffing box (pc.#s 447 (or 442), 446 and 436). Screw this assembly onto the same adapter used to machine the seat and ascertain that these three parts are in perfect alignment and run true.



With the stem and ball in place, and before assembling the spring-case portion of the valve, pack the stuffing box.

Run a #16 drill (0.177" dia.) through the six holes in the adjusting screw and the stuffing box nut. Make a pin wrench from a piece of 1/4" drill rod about 3" long, turned down to 0.175" for a distance of 1/4" on one end. Chamfer each end 1/64" x 45 degrees to knock off any sharp edges. Then heat the small end red hot with a torch and quench in cylinder oil. This will toughen the wrench sufficiently to adjust your stuffing box nut and adjusting screw.

Assemble valve. Use Permatex cement on both sides of the paper gasket. Place the gasket against the twelve hole surface of the base, or top cap. Insert two fillister-head screws (180 degrees apart) through the top cap and gasket. Then put the two diaphragms in place. Bring the top cap and the body together and screw the two screws finger tight; then install the remaining ten screws.

Holding the body in a vise (using copper jaws), tighten the twelve screws evenly, using a heavy-duty screw driver and a 6" adjustable wrench. After assembly, bring the adjusting screw (pc. #434) up against the top spring button (pc. #440), and compress the spring about three complete turns.

With the locknut (pc. #437) backed off as far as it will go, tighten the assembly consisting of the stuffing box, nipple, double head, and stub cap (pc. #s 436, 446, 447, and 448) until the stem holds the ball firmly on the seat. Then, back off the assembly 3/4's of a turn and set the lock nut (pc. #437) against the body (pc. #431).

Check the stuffing-box nut and adjust for proper tension. Tighten the stuffing box nut set screw, making sure that there is clearance between the end of the set screw and the stuffing box nut.

Using high pressure air, set the valve to shut off at the desired pressure, usually between 500 and 600 psi. Using the heaviest duty spring in the body should make this valve work with a maximum differential of no more than 25 psi.

If these instructions are followed carefully, this valve should give trouble-free service for many years.

- 445 Valve stem tip. Many times the valve stem tip and the valve stem (pc. #'s 445 and 444) are combined into just one stem the diameter of the valve stem.
- 442 Single head. This fitting, which contains the seat and valve ball (pc. #445B), was available with either one side outlet or two (pc. #447).
- 449 Wire gauge strainer. Although seldom found, the parts list calls for a strainer which is retained within the single head (pc. #442) or the double head (pc. #'s 447 or 447A) by means of the stub cap (pc. #448).

#### Steam Talk

#### Stanley Fuel Automatics: A Modification

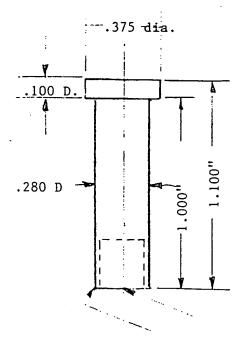
by Ole B. Vikre, Jr.

I first heard about this "fix" several years ago when I asked Ole's son-in-law, Brent Campbell, why he didn't bother to shut his pressure retaining valve when he parked his car for any length. How nice not to lose all your fuel pressure because you forget to shut it at the end of the day! I've been asking Ole for this ever since, so I'm especially happy to present this article now.

The Stanley fuel automatic, part #460 in the Stanley parts catalogue, has been manufactured in three distinct styles:

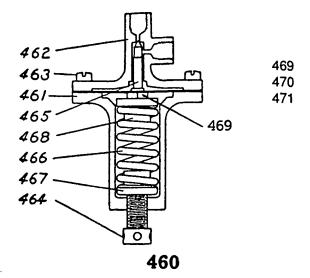
- A. Exactly as shown in the parts catalogue as #460 see drawing;
- B. With the lower spring seat, parts catalogue #468, sitting directly on the diaphragm without the hex nut, #469;
- C. The style used in the condensing cars, which has an additional part, shown in the

#### PIECE #1



Cavity 1/4" d. x 1/4" deep for Nylatron insert.

Swage after insertion of Nylatron to retain. Insert size 1/4" d. x 5/16" long.



article as piece #2, with a 7/16"-20 thread, made completely of 5/8" hex brass. It originally had a hardened steel insert that served as a seat, a spring-loaded needle also made from steel, and used a dimpled diaphragm. The needle, parts catalogue #465, and its mating seat, which was pressed into the 7/16"-20 end of piece #2, were both hardened steel. These pieces soon rusted and otherwise deteriorated, causing leakage.

This "new" modification uses one each of pieces #1, #2 and #3, as shown, plus a gasket and diaphragm (without a hole). It also employs a Nylatron insert (also called molybdenum-filled nylon) 1/4" in diameter x 5/16" long. This insert is placed into the end of piece #1 and swaged in place. After swaging, the end is machined square with the axis of piece #1.

If your fuel automatic is exactly like #460 in the parts catalogue, the area in the way of the pin (or needle) will have to be carefully enlarged to accommodate pieces #1 and #3, finishing the bottom face with a flat-bottomed drill a few thousandths of an inch larger than the o.d. of your small spring, piece #3 (.422-.425").

The next step is to make up a sleeve from scrap brass the same i.d. and o.d. as the small spring, piece #3, but only 7/8" in length. Using this sleeve in place of the small spring, install it along with piece #1 into the valve cavity of parts catalogue #462 which you previously machined with the flat-bottomed drill.

The .375" diameter button on the end of piece #1 and the gasket surface of parts catalogue #642

continued on Page 15

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AMPCO METAL Head has a movable hook.

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Hex Keys

BERYLLIUM COPPER.

Spanner Wrenches Adjustable-Head

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Striking-Face Box Wrenches

NET EACH

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	Straight Orff Pin	Barrel Orfft Pin	Center Punch	Š
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V		

Pins and Punches	Point Overall Dia, Length No. NET EACH	942" \$8.50 14" 44" 3495A21 \$8.50	ອີ	5½" 6477A31 6" 6477A32	% 6% 6477A33 11.59 % 8' 6477A34 17.26 % 12' 6477A35 27.16

\$ <u>\$</u> \$	
25.22 26.82 26.82	
79A1	
8' 6479A12 15.92 8' 6479A13 25.66 8' 6479A14 41.94	
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**Box Wrenches** 

Monkey Wrenches

. 7. 5. 2.	×= :		225
NET EACH	6502A1\$39.09	28.187 78.18	MENCHES WITH EXTRA-HARD AND JAW INSERTS
No. I WRENC	6502A1	6502A3 6502A4	MITH EX
Jaw No. NET Cap. ADJUSTABLE WRENCHES	MIPCO METAL	. <b>.</b>	ENCHES O
₹			PEWR

		_								
HARD	X \$112.92	148.02	257.04	474.63	\$30.90	107 52	138.86	187.57	320.83	220.00
WRENCHES WITH EXTRA-HARD	UMINUM WITH BRONZE HOOK	6461A22+	6461A24	461A28	6498A1 +	6498A2	6488A4	6498A5	6498AB	6498A7
ES WIT	WITH BRO									
WRENC	MINIM	74.	272	5,7	IPCO METAL	_	, <u>, , , , , , , , , , , , , , , , , , </u>	2.1%	3.75	ຳ

6498A6	ICHES Iso call	nches. 6482A11		6482A16	handle.
9.5	Y WRE	wrench			note in
3/2	MONKEY WRENCHES	is and railroad wrenches	2%	3,4	has no hanging hole in handle.
tonou				on pale	10

shall go screwdi combination pla liers, 10 adjust ich, 12 point b 12 % putty knife, 3 12 % long 12 indie brush, and i male brush, and i	
(Vi-x-8' blade), Phillips screwding the state of the stat	TAM-TAM TOTAL

728 8 8 8 8 E
ramo ramo ramo raclude ade), ing-no lon pli
SET- Set in Set in O'. 7" (c) Indination
HAZ-MAT SET—The 0-4 subtects has a screw-on annated tools. A removation ools upright, Set Includes (Mar. Set Includes (H3. Set blade), 7 inon-rose (H3. Set blade), 7 inon-rose (H3. Set Combination pless, 143. Set on on one of the hard of the one of the one of 12 in one of 12 in hard one of the one of 12 in one of 12
IAZ-N buck ningth ols up ver ( 3×6" fer, 8
PESSAX.  7-PIECE HAZ-MAT SET—The B-C work work work work work work work work
17-PIECE HAZ-MAT SET—The 5-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C-C

100 90 00 00 00 00 00 00 00 00 00 00 00 0	0
screwdriver (#3.8c Plates). In July and the cutter. 8' combination please, with side cutter. 8' combination please able werenches. 14' aluminum plea were able werenches. 54' blade but 12' drum-plug werench. 54' blade but knife. 74' putty knife. 15' decks screen's knife. 74' putty knife. 15' decks screen's spray-booth screener, 9' shoe handle bit 12'/s' long 12-oz. claw hammer. 9' harm claw creete opener, and 12' in stills.	
place), recombination of places, 8" a aluminum aluminum nch, 5%" (e. 15" dec ir, 8" shoe law hamm and 12" tir and 12" tir NE	
ar (#3 × 6" b cutter, 8" d-groove ches, 14" putty wrei putty suit st scrape 3 12-oz. c	
crewdrive with side congue-an able wren 12" drum knife, 7% spray-boo spray-boo catter	No. 401

•	O METAL.	
Z	1.387"17"6507A44148.67	Butch
9.	131/2" 6507A42 1	
	1316	,
z	121/4" 6507A38	Buring 1
8	-	
	Š	KUINES
÷	3	The state of the s
-	6	CDAGO
÷		Ite opener, and in NET/SET \$660
÷		ng 12-02. claw tion the snips.
÷		Sorn Scrapel, o Silos Parin
÷	0 707" 714" A507A18 55.75	purity Killie, in shoe handle but
÷	59.38 0.779" 714" RE07A14 59.38	n-ping wiells.
-		inches, the party 53/r blade but
÷	The Length No. NET EACH	Ind-groove pilets; of the west
	10-point nex nead and suargin parton.	s cutter, 8" confidence of and 12 and
•	with a nammer blow. Hess wishing	ver (#3 x 6" blade), / long-nos-
•	IPCO METAL, Loosen mozen, rusted	swdriver (//16 x 6 DIBUe), 1
	Popular state of the state of t	os tools uprignt. Set literation plan
		B SOUTH OF THE PARTY OF THE PAR

1.387"17"	O METAL.	Point Overal	MONT DRIFT PIN	24,5	///e 10°	REL DRIFT PINS	, A/e	
Butche		Square-Point	BERYLLIUM COPPER. Handles are	Blade Overall No. NET E.	PARING KNIFE 3926A1 69/4"	BUTCHER KNIFE	SQUARE-POINT KNIFE ARABA11	

Stock Point Oversil Dia. Dia. Length CENTER PUNCHES	36" 1/6" 41/5"	PIN PUNCHES	% % % % % % % % % % % % % % % % % % %	14/16" 1/2" 8"
No. NET EACH	13.16		13.91	6479A13 25.66 6479A14 41.94
a €S:		] ] ],	on i	111

Socket Spanne Spanne Spanne Nonspa Split Bo Spring
WRENCHES, Oil Filter 540, 2148 Open End 2154-2161, Open End 2154-2161, Open End 2125 Open End Normagnetic 2125 Pip Norsparking 2125 Pip Norsparking 2125 Pip Normagnetic 2125 Paliroad Norsparking 2125 Ratchet 1021412 2155 Patchet Normagnetic 2124 Ratchet Normagnetic 2124 Ratchet Normagnetic 2124 Ratchet Normagnetic 2124 Ratchet Normagnetic 2125 Socket 2121, 2164, 2165 Socket 1212, 2168, 2203 Socket Hex Key 2178 Socket Insulated 2178 Socket Insulated 2178 Socket Hex Key 2178 Socket Insulated 2178 Socket Insulated 2178 Socket Insulated 2178 Socket Normagnetic 2124 Socket Insulated 2178 Socket Normagnetic 2128

Towel 1138  WRIST Rescue Straps 757  Restue Straps 757  Rests, Computer 720  Supports 695  WRISTWATCHES 695  WRISTWATCHES 773  Pads 773  Pads 775  WYES, 881  Plastic Pipe 1577	X-RAY DETECTORS785 XLR CONNECTORS806 XYLENE	<b> </b>	Y-BENDS, PIPE 15/0, 15/2 YARD WASTE BAGS321 YARN, Ceramic
Socket Nonsparking2124 Spanner	Nonsparking al Box al Box al gnetic al copen End al Open End	69, 2220-2 (ey, 2220-2 Fitting.	2149,

Nyton 2541 Polyester 2541 York Ends 1486 Pins 1488 YOROLITE PLASTIC 2612	Z-88 LUBRICANTS694 ZAPPERS, BUG1180 ZETEX		Plugs, Corrosion 1297 ZIPPER Bags 325 Chain 2294 T-150	cs on Boards. MICS	S, T OILERS
Towel 1138  WRIST Rescue Straps 757  Rests, Computer 720  Supports 767  WRISTWATCHES 695  WRISTWATCHES 705  WARTON OF Frase 713  Pads 705  WYES Line 881  Hose Line 881	×	X-RAY DETECTORS 785 XLR CONNECTORS 866 XYLENE 1097	<b>&gt;</b>	Y-BENDS, PIPE 1570, 1572 YARD WASTE BAGS321 YARDSTICKS	YAKN, Kevlar2541 Natural Gut403 Nomex2541
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